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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/023,778	12/17/2001	Cornelius Peter	TRW (AEC) 6002	6631

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TAROLLI, SUNDHEIM, COVELL & TUMMINO L.L.P.
526 SUPERIOR AVENUE, SUITE 1111
CLEVEVLAND, OH 44114

EXAMINER

LE, DANG D

ART UNIT	PAPER NUMBER
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2834

DATE MAILED: 06/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/023,778

Applicant(s)

PETER ET AL.

Examiner

Dang D Le

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 22-41 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 22, 23, and 25-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Bobay et al. (5,962,938)

Regarding claim 22. A drive unit for a fan in a vehicle, said drive unit comprising a brushless DC electric motor with a rotor and a stator, an electronic actuation system and a housing molded of plastics,

- Said electronic actuation system (34) being surrounded by said housing, said housing supporting said electric motor,
- Said housing having a bearing sleeve integrally molded with said housing for mounting said rotor of said electric motor,
- Said rotor being an external rotor extending around said stator, said housing being assembled of two separate and distinct housing parts,

- One of said housing parts comprising an upper housing part (26) including said integrals molded bearing sleeve and supporting said electric motor,
- The other of said housing parts comprising a lower housing part (16) that faces said upper housing part and closes an open main side of said upper housing art,
- Said upper housing part having a generally cylindrical depression (near 24), said cylindrical depression surrounding said integrally molded bearing sleeve,
- A circumferential edge of said rotor (below lower magnet 68) extending into said cylindrical depression of said upper housing part.

Regarding claims 23, 25-28, it is noted that Bobay et al. also show all of the limitations of the claimed invention.

4. Claims 36-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamaguchi et al. (6,107,708)

Regarding claim 36, Yamaguchi et al. show a drive unit for a fan in vehicle, said drive unit comprising a brushless DC electric motor with a rotor and a stator, an electronic actuation system, and a housing molded of plastics,

- Said electronic actuation system (18) being surrounded by said housing (1, 17), said housing supporter said electric motor, said housing having air inlet openings for cooling of electronic components of said electronic actuation system and for cooling components of said electric motor,
- Said rotor being generally pot-shaped and having air outlet openings (30) on an end face of said rotor remote from said air inlet openings of said housing.

Regarding claims 37-40, it is noted that Yamaguchi et al. also show all of the limitations of the claimed invention.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bobay et al. in view of Hayashibara et al.

Regarding claim 24, Bobay et al. show all of the limitations of the claimed invention except for said lower housing part and said upper housing part being connected with each other by latching means.

Hayashibara et al. show said lower housing part and said upper housing part being connected with each other by latching means (22) for the purpose of connecting the housing parts together.

Since Bobay et al. and Hayashibara et al. are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to connect said lower housing part and said upper housing part with each other by latching means as taught by Hayashibara et al. for the purpose discussed above.

8. Claims 29-31 and 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bobay et al. in view of Sunaga et al.

Regarding claim 29, Bobay et al. show all of the limitations of the claimed invention except for said stator being provided with axially projecting connection tags that extend through openings of said cylindrical depression of said upper housing part and that may be connected to a printed circuit board arranged in an interior of said housing.

Sunaga et al. show said stator being provided with axially projecting connection tags that extend through openings of said cylindrical depression of said upper housing part and that may be connected to a printed circuit board arranged in an interior of said housing for the purpose of providing electric current to the stator winding.

Since Bobay et al. and Sunaga et al. are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to provide projecting connection tags as taught by Sunaga et al. for the purpose discussed above.

Regarding claims 30, 31, and 33-35, it is noted that Sunaga et al. also show all of the limitations of the claimed invention.

9. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bobay et al. in view of Sunaga et al. as applied to claim 31 above, and further in view of Ineson et al.

Regarding claim 32, the fan unit of Bobay et al. modified by Sunaga et al. includes all of the limitations of the claimed invention except for said contact tags projecting from an outside of said housing and are surrounded by at least one plug collar molded with said housing.

Ineson et al. show said contact tags projecting from an outside of said housing and are surrounded by at least one plug collar (68) molded with said housing for the purpose of providing electrical connection.

Since Bobay et al., Sunaga et al. and Ineson et al. are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to project said contact tags from an outside of said housing and surround it with at least one plug collar molded with said housing as taught by Ineson et al. for the purpose discussed above.

10. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi et al. in view of Sunaga et al.

Regarding claim 41, Yamaguchi et al. show all of the limitations of the claimed invention except for said electronic actuation system having a power part and a control part, said power part and said control part being mounted on separate circuit boards, said air inlet openings of said housing being provided next to power semiconductors of said power part.

Sunaga et al. use two separate circuit boards for the purpose of reducing heat.

Since Yamaguchi et al. and Sunaga et al. are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use two separate circuit boards as taught by Sunaga et al. for the purpose discussed above.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Information on How to Contact USPTO

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dang D Le whose telephone number is (703) 305-0156. The examiner can normally be reached on Monday through Friday.

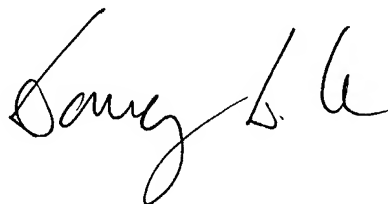
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

June 8, 2003

A handwritten signature in black ink, appearing to read "Larry L. G." with a stylized flourish at the end.

DANGLE
PRIMARY EXAMINEE